

ABSTRACT OF THE DISCLOSURE

A method of forming buried wiring, includes the steps of forming an insulating layer having a trench on a semiconductor substrate; forming a conductive layer mainly composed of copper on the insulating layer in such a manner that the trench is filled with the conductive layer; removing an oxide layer generated in a surface of the conductive layer by oxidation; forming a cap layer made of a material having less mechanical strength than the oxide layer, on the conductive layer; and removing the cap layer and a part of the conductive layer by chemical mechanical polishing in such a manner that the conductive layer is left in the trench.